

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A Web service providing apparatus, comprising:

a controller including

a server processing part configured to control receipt of a process request for a process from a requesting apparatus connected to the Web service providing apparatus via a communication network, and to control transmission of a process response corresponding to the process request to the requesting apparatus in accordance with a predetermined protocol, the process request including a command to retrieve target information from an image forming apparatus connected to the Web service providing apparatus via the communication network;

a target information type determination part configured to determine a target information type that is processable by both the image forming apparatus and the Web service providing apparatus, the target information type determination part being configured to determine the target information type based on whether the target information type is ~~shared between~~ included in both a first processable target information type list of the image forming apparatus and a second processable target information type list of the Web service providing apparatus;

a condition acquisition control part configured to control, in response to an instruction from the server processing part, acquisition of the target information designated by the process request from the image forming apparatus that manages the target information based on the determined target information type; and

a service providing part configured to perform the requested process on the target information and to send a result of the process to the server processing part.

2. (Previously Presented) The Web service providing apparatus as claimed in claim 1, wherein the controller includes a processor configured to execute

a program including the condition acquisition control part and the service providing part;

a control service configured to manage a hardware resource used in the process; and
an operating system configured to control the program and the control service.

3. (Previously Presented) The Web service providing apparatus as claimed in claim 1, wherein the controller further includes a client processing part configured to control, in response to an instruction issued by the condition acquisition control part, transmission of a process request to the image forming apparatus and receipt of a process response from the image forming apparatus in accordance with the predetermined protocol.

4. (Previously Presented) The Web service providing apparatus as claimed in claim 3, wherein the condition acquisition control part comprises:

a sequence control part configured to control a sequence of processes to acquire the first processable target information type list regarding the target information from the image forming apparatus and internally acquire the second processable target information type list regarding the target information in the Web service providing apparatus; and

the target information type determination part configured to determine the target information type based on the first processable target information type list and the second processable target information type list acquired by the sequence control part.

5. (Previously Presented) The Web service providing apparatus as claimed in claim 4, wherein the sequence control part comprises:

a first control part configured to control the client processing part to acquire the first processable target information type list from the image forming apparatus by sending a process request for the first processable target information type list to the image forming apparatus;

a second control part configured to control the client processing part to acquire the second processable target information type list from the Web service providing apparatus by internally issuing a process request for the second processable target information type list to the server processing part;

a determination instruction part configured to cause the target information type determination part to make the determination based on the first processable target information type list and the second processable target information type list; and

an information acquisition part configured to acquire the target information from the image forming apparatus in accordance with the target information type determined by the target information type determination part.

6. (Previously Presented) The Web service providing apparatus as claimed in claim 3, wherein the client processing part comprises:

a process request creation part configured to, in response to an instruction issued by the sequence control part, create a process request, which is to be sent to the image forming apparatus, corresponding to the instruction in accordance with the predetermined protocol; and

a process response interpretation part configured to interpret a process response, which is received from the image forming apparatus, corresponding to the process request and to inform a result of the interpretation to the sequence control part.

7. (Previously Presented) The Web service providing apparatus as claimed in claim 1, wherein the service providing part comprises a service execution part configured to execute the process corresponding to the process request received from the requesting apparatus or a process request that is internally created.

8. (Previously Presented) The Web service providing apparatus as claimed in claim 1, wherein the server processing part comprises:

a process request interpretation part configured to interpret the process request for the process on the target information in accordance with the predetermined protocol; and

a process response creation part configured to create a process response to indicate a result of the process in accordance with the predetermined protocol.

9. (Previously Presented) The Web service providing apparatus as claimed in claim 8, wherein the process request interpretation part comprises:

a determination part configured to determine whether the process request is to acquire the target information from the image forming apparatus; and

a notification part configured to inform the condition acquisition control part of the process request based on a result of the determination made by the determination part.

10. (Previously Presented) The Web service providing apparatus as claimed in claim 8, wherein the process response creation part comprises a control result creation part configured to create a process response to indicate a result of the control of the condition acquisition control part in accordance with the predetermined protocol.

11. (Previously Presented) The Web service providing apparatus as claimed in claim 1, wherein the condition acquisition control part comprises:

an attribute information acquisition part configured to acquire attribute information regarding the target information from the image forming apparatus; and

a control part configured to cause a client processing part to internally issue the process request for the process on the target information to the client processing part based on the attribute information,

wherein the service providing part is configured to execute the process requested by the requesting apparatus via the server processing part based on the attribute information.

12. (Previously Presented) The Web service providing apparatus as claimed in claim 1, further comprising:

a display part including

a first display part configured to display a list of selectable apparatuses that a user is allowed to select among apparatuses connected via the communication network;

a second display part configured to, when the user selects a desired apparatus from the list of apparatuses, display a list of information items managed by the image forming apparatus; and

an apparatus determination part configured to, when the user designates a desired information item from the list of information items and the desired apparatus from the list of selectable apparatuses, determine the designated apparatus as a processing apparatus to perform the process.

13. (Previously Presented) The Web service providing apparatus as claimed in claim 12, wherein the second display part is configured to display the information items in a reduced size on the display part.

14. (Previously Presented) The Web service providing apparatus as claimed in claim 1, wherein the requesting apparatus is one of the Web service providing apparatus, the image forming apparatus, and a terminal connected to each other via the communication network.

15. (Previously Presented) The Web service providing apparatus as claimed in claim 1, wherein the communication network is one of a network including a wireless LAN, a serial communication line including an infrared communication, and a parallel communication line.

16. (Original) The Web service providing apparatus as claimed in claim 1, wherein the predetermined protocol is a Simple Object Access Protocol.

17. (Currently Amended) A method of providing a Web service for a Web service providing apparatus, the method comprising:

a server processing step of controlling, by the Web service providing apparatus, receipt of a process request for a process from a requesting apparatus, connected to the Web service providing apparatus via a communication network, and transmission of a process response corresponding to the process request to the requesting apparatus in accordance with a predetermined protocol, the process request including a command to retrieve target information from an image forming apparatus connected to the Web service providing apparatus via the communication network;

a determination step of determining a target information type that is processable by both the image forming apparatus and the Web service providing apparatus, the target information type being determined based on whether the target information type is ~~shared between~~ included in both a first processable target information type list of the image forming apparatus and a second processable target information type list of the Web service providing apparatus;

a condition acquisition control step of controlling, in response to an instruction from the server processing step, acquisition of the target information designated by the process request from the image forming apparatus that manages the target information based on the determined target information type; and

a service providing step of performing the requested process on the target information and informing the server processing step of a result of the process.

18. (Currently Amended) A Web service providing apparatus, comprising:

a controller including

a service providing part configured to manage target information and to provide the target information to an image forming apparatus, which requests the target information based on a process request including a command to retrieve the target information from the Web service providing apparatus and performs a process on the target information, in accordance with a target information type received from the image forming apparatus, the target information type being processable by both the image forming apparatus and the Web service providing apparatus and determined based on whether the target information type is ~~shared between~~ included in both a first processable target information type list of the image forming apparatus and a second processable target information type list of the Web service providing apparatus;

a process request interpretation part configured to interpret the process request to request the process in accordance with a predetermined protocol and to inform the service providing part of the process; and

a process response creation part configured to create a process response to indicate a result of the process in accordance with the predetermined protocol.

19. (Previously Presented) The Web service providing apparatus as claimed in claim 18, wherein the service providing part comprises a processable condition providing part configured to, in response to receipt of a process request to acquire the second processable target information type list with respect to the image forming apparatus, send a process response to indicate the second processable target information type list in accordance with the predetermined protocol, and after the transmission of the process response to indicate the second processable target information type list, the service providing part being configured to provide the target information to the image forming apparatus in accordance with the target information type received from the image forming apparatus.

20. (Previously Presented) The Web service providing apparatus as claimed in claim 18, wherein the controller further comprises:

a process request creation part configured to create the process request for the process in accordance with the predetermined protocol; and

a process response interpretation part configured to interpret the received process response corresponding to the process request.

21. (Previously Presented) The Web service providing apparatus as claimed in claim 18, further comprising:

a display part, including

a first display part configured to display a list of selectable apparatuses that a user is allowed to select among apparatuses connected via a communication line;

a second display part configured to, when the user selects a desired apparatus from the list of selectable apparatuses, display a list of information items managed by the selected apparatus; and

an apparatus determination part configured to, when the user designates a desired information item from the list of information items and the desired apparatus from the list of selectable apparatuses, determine the designated apparatus as the image forming apparatus.

22. (Currently Amended) A method of providing a Web service for a Web service providing apparatus, the method comprising:

a service providing step of managing, by the Web service providing apparatus, target information and providing the target information to an image forming apparatus, which requests the target information based on a process request including a command to retrieve the target information from the Web service providing apparatus and performs a process on the target information, based on a target information type received from the image forming apparatus, the target information type being processable by both the image forming apparatus and the Web service providing apparatus and determined based on whether the target information type is ~~shared between~~ included in both a first processable target information type list of the image forming apparatus and a second processable target information type list of the Web service providing apparatus;

a process request interpretation step of interpreting the process request to request the process in accordance with a predetermined protocol and informing the service providing step of the process; and

a process response creation step of creating a process response to indicate a result of the process in accordance with the predetermined protocol.

23. (Currently Amended) A terminal, comprising:

a display unit;

a process request creation part configured to create a process request to cause a first image forming apparatus to acquire target information managed by a second image forming apparatus from the second image forming apparatus in accordance with a target information type and perform a process on the target information in accordance with a predetermined protocol, wherein

the process request is transmitted to the first image forming apparatus and includes a command to retrieve target information from the second image forming apparatus,

the target information type is processable by both the first image forming apparatus and the second image forming apparatus and determined based on whether the target information type is ~~shared between~~ included in both a first processable target information type list of the first image forming apparatus and a second processable target information type list of the second image forming apparatus, and

the first image forming apparatus, the second image forming apparatus, and the terminal are connected to each other via a communication network;

a process response interpretation part configured to interpret a process response corresponding to the process request and to acquire a result of the process performed by the first image forming apparatus; and

a display control part configured to display the result of the process on the display unit of the terminal.

24. (Currently Amended) A computer-readable storage medium having embedded therein instructions, which when executed by a processor, cause a terminal to perform a method, comprising:

a process request creation step of creating a process request to request a first image forming apparatus to acquire target information managed by a second image forming apparatus from the second image forming ~~second~~ apparatus in accordance with a target information type and perform a process on the target information in accordance with a predetermined protocol, wherein

the process request is transmitted to the first image forming apparatus and includes a command to retrieve target information from the second image forming apparatus,

the target information type is processable by both the first image forming apparatus and the second image forming apparatus and determined based on whether the target information type is ~~shared between~~ included in both a first processable target information type list of the first image forming apparatus and a second processable target information type list of the second image forming apparatus, and

the first image forming apparatus, the second image forming apparatus, and the terminal are connected to each other via a communication network;

a process response interpretation step of interpreting a process response corresponding to the process request and acquiring a result of the process of the first image forming apparatus; and

a display control step of displaying the result of the process on a display unit of the terminal.

25-41. (Cancelled).

42. (Currently Amended) A Web service providing apparatus, comprising:
a controller including

a service providing part configured to perform, in response to a process request, a process on target information received from an image forming apparatus that manages the target information in accordance with a target information type and to provide a result of the process to the image forming apparatus, the process request including a command to retrieve the target information from the image forming apparatus, the target information type being processable by both the image forming apparatus and the Web service providing apparatus and determined based on whether the target information type is ~~shared between~~ included in both a first processable target information type list of the image forming apparatus and a second processable target information type list of the Web service providing apparatus;

a process request interpretation part configured to interpret the process request for the process in accordance with a predetermined protocol and to inform the service providing part of the process; and

a process request creation part configured to create a process response to indicate a result of the process in accordance with the predetermined protocol.

43. (Previously Presented) The Web service providing apparatus as claimed in claim 42, wherein the service providing part comprises a processable condition providing part configured to, in response to receipt of a process request to acquire the second processable target information type list with respect to the image forming apparatus, send a process

response to indicate the second processable target information type list in accordance with the predetermined protocol, and after the transmission of the second processable target information type list, the service providing part being configured to provide a result of the process on the target information received from the image forming apparatus in accordance with the target information type.

44. (Previously Presented) The Web service providing apparatus as claimed in claim 42, further comprising:

a process request creation part configured to create the process request for the process in accordance with the predetermined protocol; and

a process response interpretation part configured to interpret the received process response corresponding to the process request.

45. (Currently Amended) The Web service providing apparatus as claimed in claim 42, further comprising:

a display part, the display part including:

a first display part configured to display a list of selectable apparatuses that a user is allowed to select among apparatuses connected via ~~[[the]]~~ a communication line;

a second display part configured to, when the user selects a desired apparatus from the list of selectable apparatuses, display a list of information items managed by the selected apparatus; and

an apparatus determination part configured to, when the user designates a desired information item from the list of information items and the desired apparatus

from the list of selectable apparatuses, determine the designated apparatus as a processing apparatus.

46. (Currently Amended) A method of providing a Web service for a Web service providing apparatus, the method comprising:

a service providing step of performing, by the Web service providing apparatus, in response to a process request, a process on target information received from an image forming apparatus managing the target information in accordance with a target information type and providing a result of the process to the image forming apparatus, the process request including a command to retrieve the target information from the image forming apparatus, the target information type being processable by both the image forming apparatus and the Web service providing apparatus and determined based on whether the target information type is ~~shared between~~ included in both a first processable target information type list of the image forming apparatus and a second processable target information type list of the Web service providing apparatus;

a process request interpretation step of interpreting the process request to request the process in accordance with a predetermined protocol and informing the service providing step of the process; and

a process request creation step of creating a process response to indicate a result of the process in accordance with the predetermined protocol.

47. (Currently Amended) A terminal, comprising:

a display unit;

a process request creation part configured to create a process request to cause a first image forming apparatus to perform a process on target information managed by a second

image forming apparatus by sending the target information to the first image forming apparatus in accordance with a target information type, wherein

the process request is transmitted to the first image forming apparatus and includes a command to retrieve the target information from the second image forming apparatus,

the target information type is processable by both the first image forming apparatus and the second image forming apparatus and determined based on whether the target information type is ~~shared between~~ included in both a first processable target information type list of the first image forming apparatus and a second processable target information type list of the second image forming apparatus, and

the first image forming apparatus, the second image forming apparatus, and the terminal are connected to each other via a communication network;

a process response interpretation part configured to interpret a process response corresponding to the process request and to acquire a result of the process performed by the first image forming apparatus; and

a display control part configured to display the result of the process on a display unit of the terminal.

48. (Currently Amended) A computer-readable storage medium having embedded therein instructions, which when executed by a processor, cause a terminal to perform a method comprising:

a process request creating step of creating a process request to cause a first image forming apparatus to perform a process on target information managed by a second image forming apparatus by sending the target information to the first image forming apparatus in accordance with a target information type, wherein

the process request is transmitted to the first image forming apparatus and includes a command to retrieve the target information from the second image forming apparatus,

the target information type is processable by both the first image forming apparatus and the second image forming apparatus and determined based on whether the target information type is ~~shared between~~ included in both a first processable target information type list of the first image forming apparatus and a second processable target information type list of the second image forming apparatus, and

the first image forming apparatus, the second image forming apparatus, and the terminal are connected to each other via a communication network;

a process response interpretation step of interpreting a process response corresponding to the process request and acquiring a result of the process performed by the first image forming apparatus; and

a display control step of displaying the result of the process on a display unit of the terminal.

49-75. (Cancelled).